

WHAT IS CLAIMED IS:

1. An image-forming apparatus comprising an envelope, an electron source and an image-forming member arranged within said envelope, an electron source drive circuit, an electroconductive member arranged on the inner wall surface of the envelope between the electron source and the image-forming member and an electric current flow path (A) extending between the electroconductive member and the ground without passing through any of the electron source and the drive circuit, characterized in that said electric current flow path (A) has a resistance lower than the resistance of another electric current flow path (B) extending between the electroconductive member and the ground by way of the electron source or the drive circuit.

2. An image-forming apparatus according to claim 1, wherein said image-forming member is formed to entirely surround the electron source.

3. An image-forming apparatus according to claim 1, wherein said envelope carries an anti-charge film arranged on the inner wall surface thereof.

4. An image-forming apparatus according to claim 1, wherein said anti-charge film is electrically

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connected to said electroconductive member.

5. An image-forming apparatus according to claim  
1, wherein said envelope carries an electroconductive  
5 film having a sheet resistance between  $10^8 \Omega/\square$  and  
 $10^{10} \Omega/\square$  on the inner wall surface thereof.

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6. An image-forming apparatus according to claim  
5, wherein said electroconductive film is electrically  
10 connected to said electroconductive member.

7. An image-forming apparatus according to claim  
1, wherein said electric current flow path A has a  
resistance not greater than 1/10 of the resistance of  
15 said electric current flow path B.

8. An image-forming apparatus according to claim  
1, wherein said image-forming member is arranged  
opposite to said electron source and said  
20 electroconductive member is arranged on the substrate  
side of the envelope where the electron source is  
arranged.

9. An image-forming apparatus according to claim  
8, wherein said electron source is entirely surrounded  
by said electroconductive member.

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10. An image-forming apparatus according to claim 8, wherein said electric current flow path A has a conductor terminal abutting against said electroconductive member.

11. An image-forming apparatus according to claim 10, wherein said conductor terminal is drawn out of the envelope through the substrate side thereof where the image-forming member is arranged.

12. An image-forming apparatus according to claim 10, wherein said conductor terminal is drawn out of the envelope through the substrate side thereof where the electron source is arranged.

13. An image-forming apparatus according to claim 11 or 12, wherein an insulator is arranged between said conductor terminal and the site through which it is drawn out.

14. An image-forming apparatus according to claim 8, wherein said image-forming member has an accelerator electrode for accelerating the electrons emitted from the electron source and the voltage applying terminal of the accelerator electrode is drawn out of the envelope through the substrate side thereof where the electron source is arranged.

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8 15. An image-forming apparatus according to claim  
7 14, wherein said electric current flow path A has a  
conductor terminal abutting against said  
electroconductive member.

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16. An image-forming apparatus according to claim  
8, wherein said image-forming member has an accelerator  
electrode for accelerating the electrons emitted from  
the electron source and the voltage applying terminal  
10 of the accelerator electrode is drawn out of the  
envelope through the substrate side thereof where the  
image-forming member is arranged.

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17. An image-forming apparatus according to any  
of claims 14 through 16, wherein an insulator is  
arranged between said voltage applying terminal of the  
accelerator electrode and the site through which it is  
drawn out.

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18. An image-forming apparatus according to claim  
17, wherein said electroconductive member is arranged  
around the site through which the voltage applying  
terminal of the accelerator electrode is drawn out with  
said insulator disposed therebetween.

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19. An image-forming apparatus according to claim  
8, wherein said envelope carries an anti-charge film

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arranged on the inner wall surface thereof.

*13*  
*12* 20. An image-forming apparatus according to claim 19, wherein said anti-charge film is electrically connected to said electroconductive member.

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21. An image-forming apparatus according to claim 19, wherein said envelope carries an electroconductive film having a sheet resistance between  $10^8 \Omega/\square$  and  $10^{10} \Omega/\square$  on the inner wall surface thereof.

22. An image-forming apparatus according to claim 21, wherein said electroconductive film is electrically connected to said electroconductive member.

23. An image-forming apparatus according to claim 8, wherein said electric current flow path A has a resistance not greater than 1/10 of the resistance of said electric current flow path B.

24. An image-forming apparatus according to claim 1, wherein said electron source has a plurality of electron-emitting devices connected to wires.

25. An image-forming apparatus according to claim 1, wherein said electron source has a plurality of electron-emitting devices connected by a plurality of

row-directional wires and a plurality of column-directional wires arranged to form a matrix.

26. An image-forming apparatus according to claim 24 or 25, wherein said electron-emitting devices are cold cathode devices.

17 <sup>18</sup> 27. An image-forming apparatus according to claim 26, wherein said cold cathode devices are surface conduction electron-emitting devices.

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